

FIG. 1 is a block diagram of a network system 10. The system 10 includes a data network 12, a switch system 28, and a switch system 30. The data network 12 is connected to the switch system 28 and the switch system 30. The switch system 28 includes a call server 34, a TPS 32, and an ITG 36. The switch system 30 includes a call server 44, a TPS 42, and an ITG 46. The data network 12 is also connected to a media gateway 52, a DHCP server 50, and a soft phone 22. The media gateway 52 is connected to a PSTN 54, which is connected to a soft phone 56. The data network 12 is also connected to a TDM 38, which is connected to a soft phone 40. The data network 12 is also connected to a soft phone 14, a soft phone 16, and a soft phone 18. The data network 12 is also connected to a soft phone 24 and a soft phone 26. The data network 12 is also connected to a soft phone 50 and a soft phone 52. The data network 12 is also connected to a soft phone 54 and a soft phone 56. The data network 12 is also connected to a soft phone 58 and a soft phone 60. The data network 12 is also connected to a soft phone 62 and a soft phone 64. The data network 12 is also connected to a soft phone 66 and a soft phone 68. The data network 12 is also connected to a soft phone 70 and a soft phone 72. The data network 12 is also connected to a soft phone 74 and a soft phone 76. The data network 12 is also connected to a soft phone 78 and a soft phone 80. The data network 12 is also connected to a soft phone 82 and a soft phone 84. The data network 12 is also connected to a soft phone 86 and a soft phone 88. The data network 12 is also connected to a soft phone 90 and a soft phone 92. The data network 12 is also connected to a soft phone 94 and a soft phone 96. The data network 12 is also connected to a soft phone 98 and a soft phone 100.

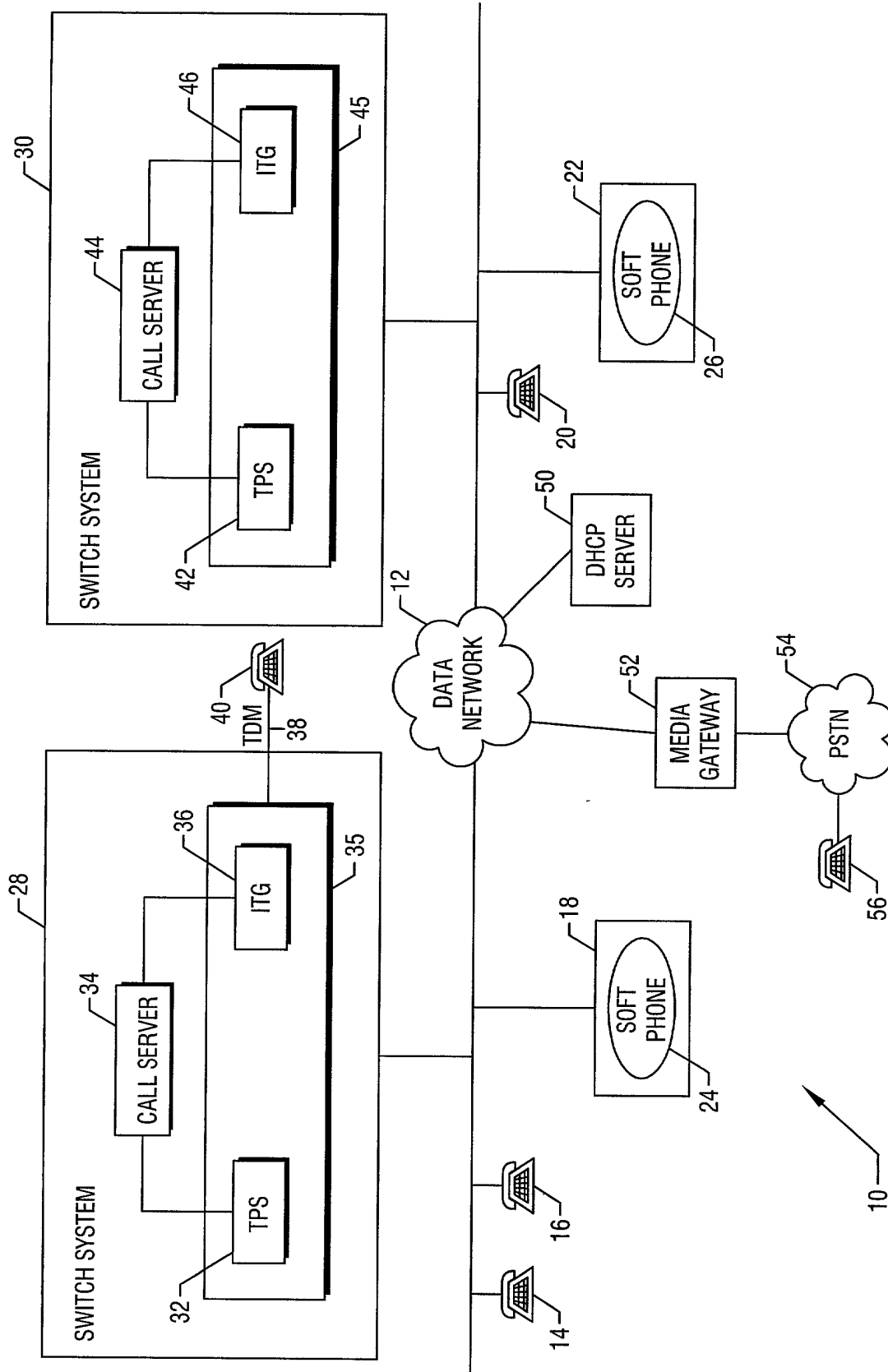


FIG. 1

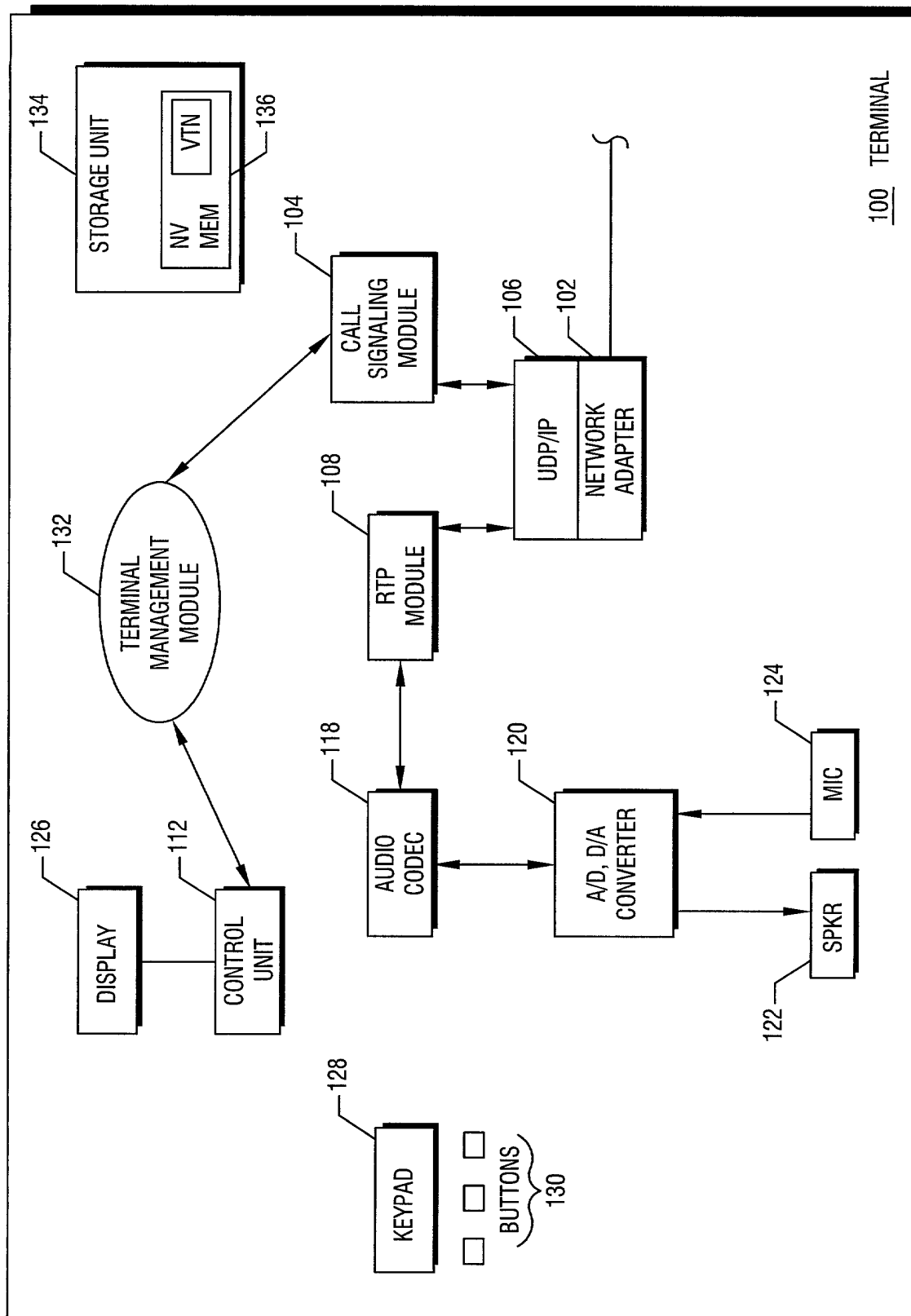


FIG. 3 is a block diagram of a system 200 for providing a TDM service over an IP network. The system 200 includes a call server 208, a switch module 226, a signaling proxy 224, a resource locator 228, a control unit 230, a storage unit 232, a TDM gateway 218, an RTP module 216, a TDM line 210, a network adapter 212, a UDP/IP module 214, a call processing module 214, a messaging layer 220, and a TDM line 210.

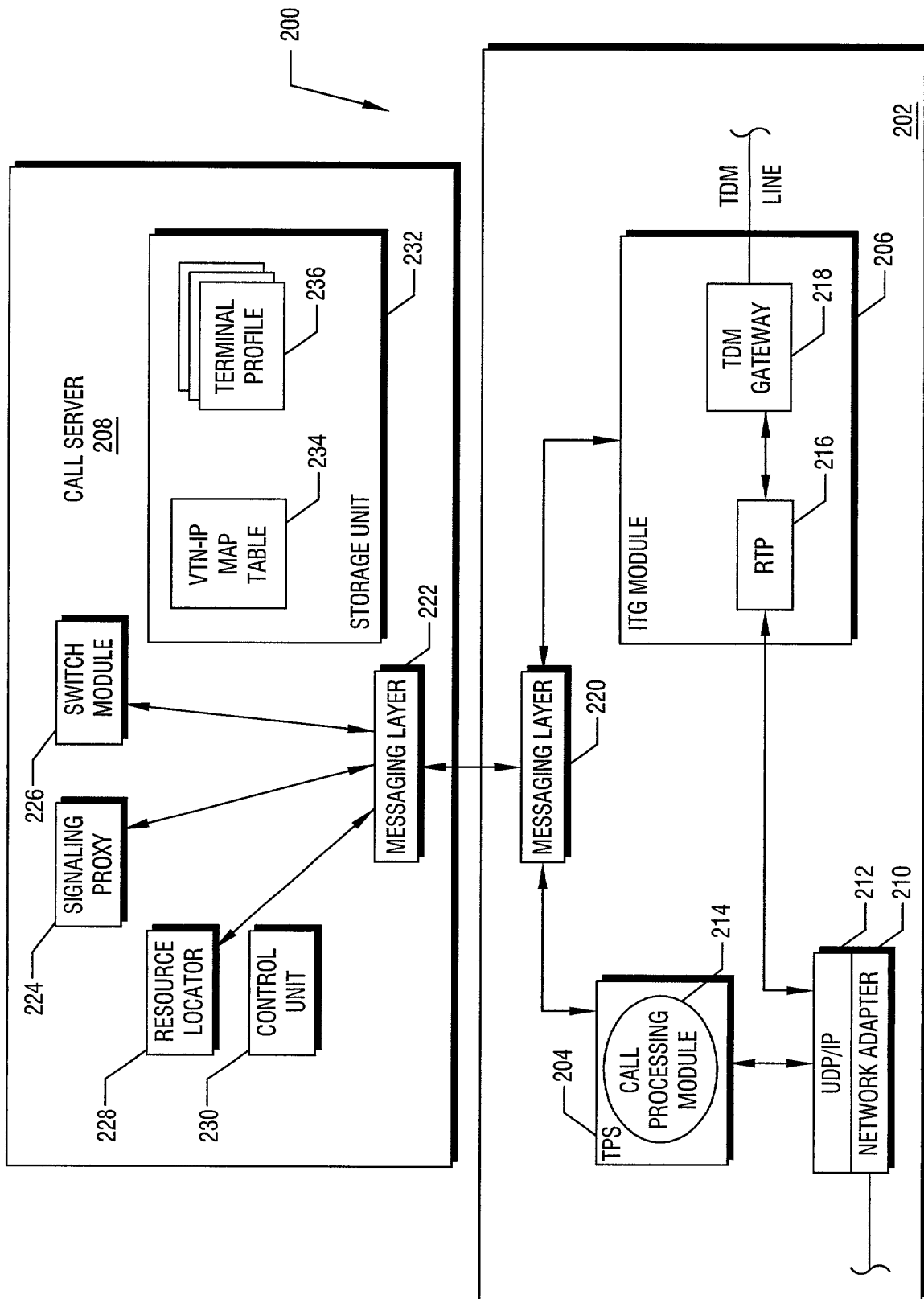


FIG. 3

FIG. 4A is a sequence diagram illustrating a process for validating a VTN (Virtual Terminal Number) across four entities: NETWORK TERMINAL, RESOURCE LOCATOR, SIGNALING PROXY, and SWITCH MODULE. The process involves message exchanges, prompts, and validation requests/responses.

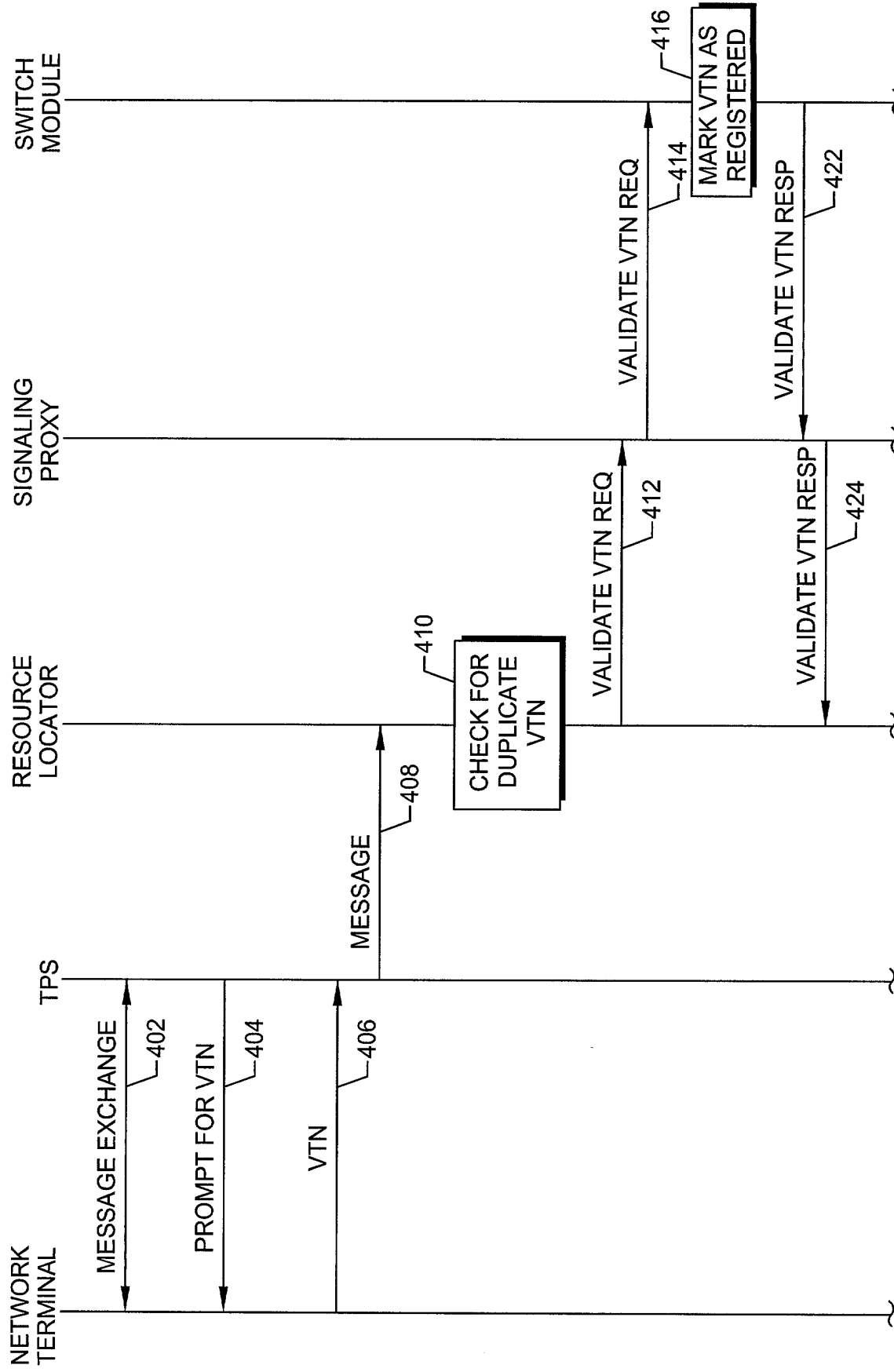


FIG. 4A

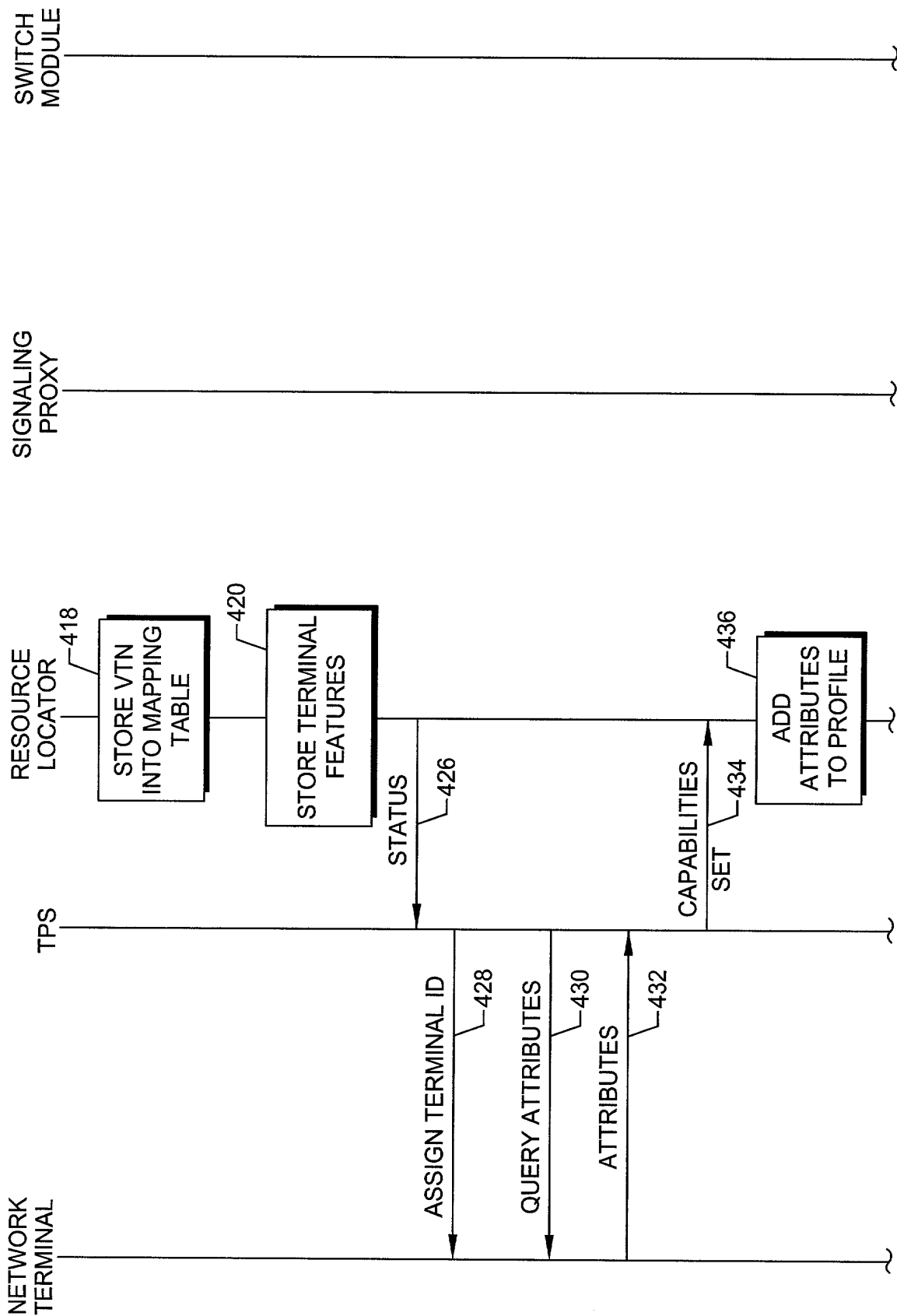


FIG. 4B

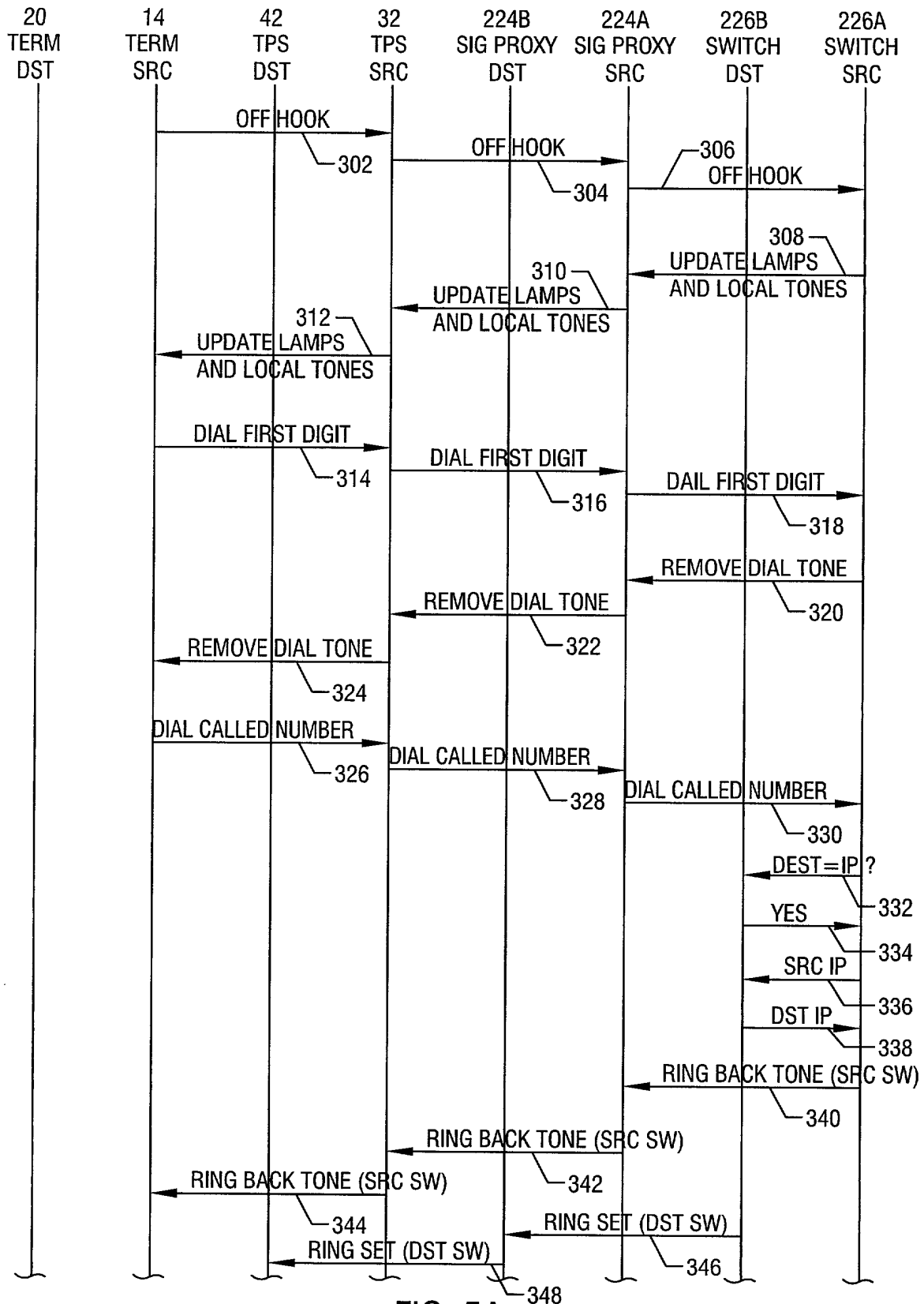


FIG. 5A

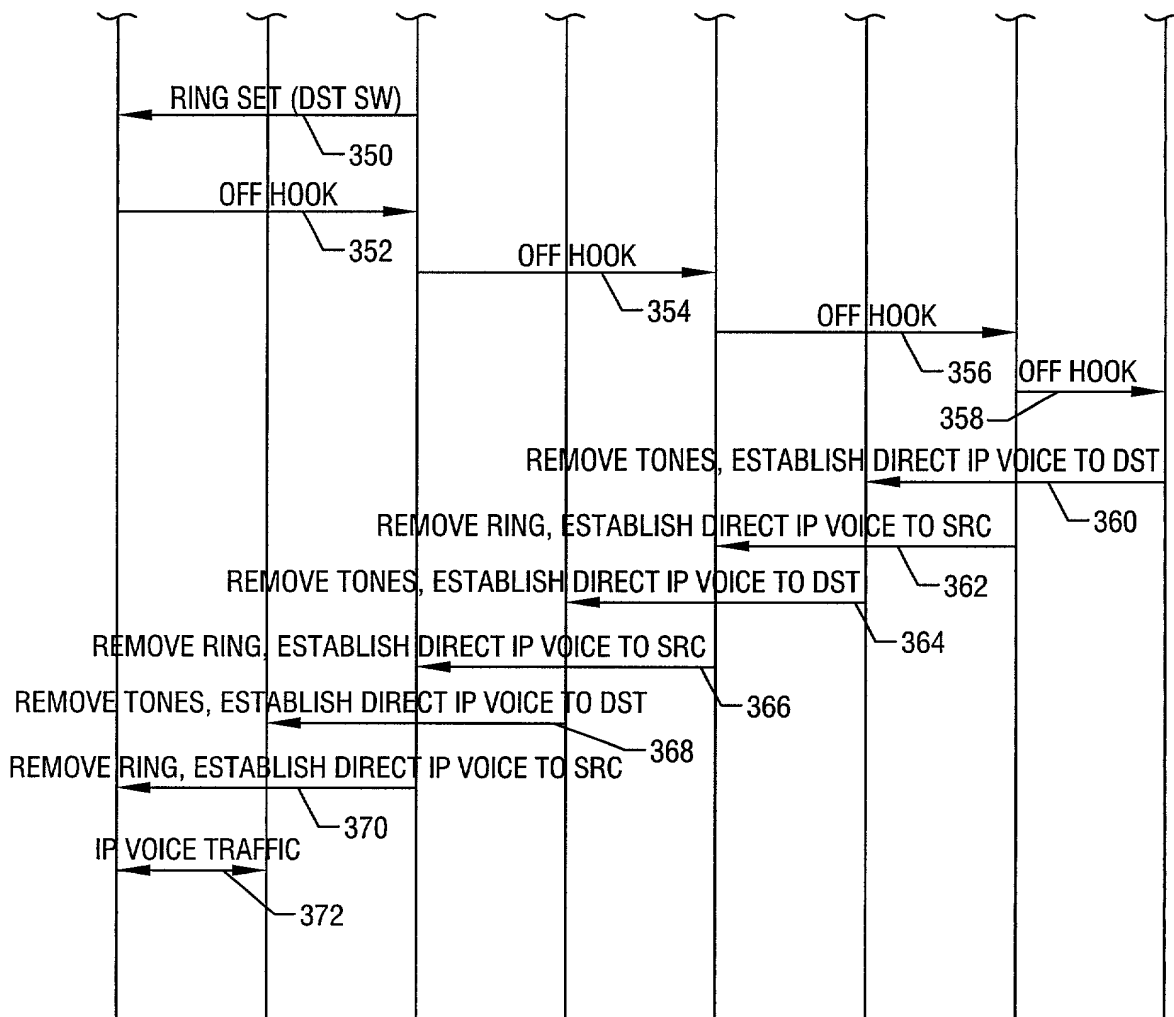


FIG. 5B